SUPER*VISION*®
INTERNATIONAL

LIGHT SOURCE INSTALLATION GUIDE

INSTALLATION
- General Requirements
- Fiberhead Installation

MAINTENANCE
- Lamp & Fuse Replacement
- Troubleshooting

APPENDIX
- Specifications
- Warranty

General Information

1. Have proper voltage at site. Voltage requirements for light sources may be specified at time of order. (Refer to figure on this page for power requirements or refer to the label on the back of the illuminator.)
2. Mount the light source in an area that has good ventilation and clearance for fan intake and exhaust. Avoid placing multiple illuminators in positions that place air exhaust and air intake vents near each other.
3. Avoid dusty areas.
4. Be sure the mounting location will allow access for bulb replacement and that there is enough clearance for the light source lid to be opened.
5. The mounting location must be a minimum distance from water, based on local, county or state building codes. Use GFI circuit breakers when installing near water.
6. For mounting use #10 screws or bolts.
7. CAUTION: Do not turn key switch to ON position when lid is open.
8. Do not operate without lamp in place. Allow lamp to cool before removing. Replace with lamps supplied by SUPER*VISION*® International, Inc. or authorized SUPER*VISION*® distributor.

ISM 1997

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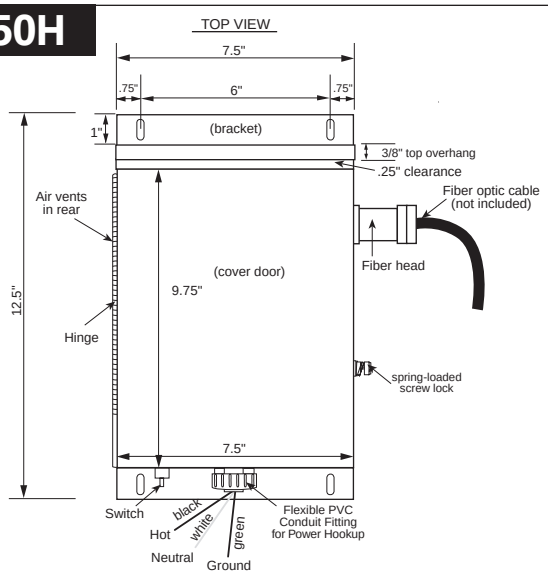
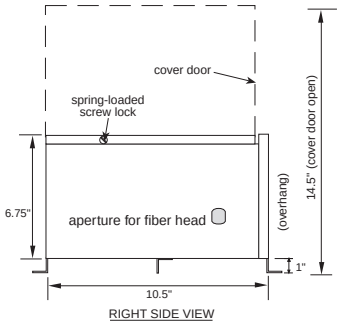
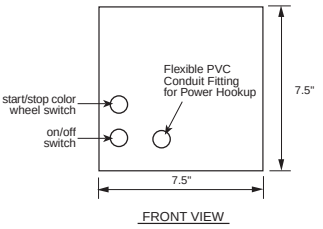
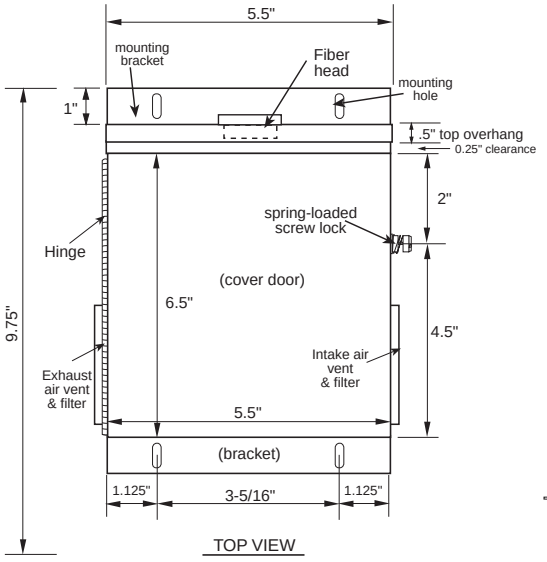
sv.250H

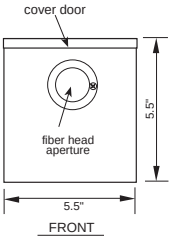


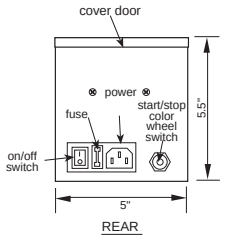


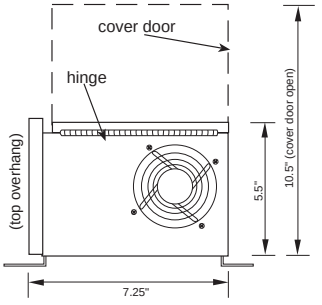


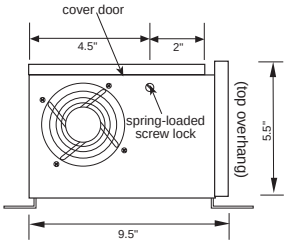
sv.750



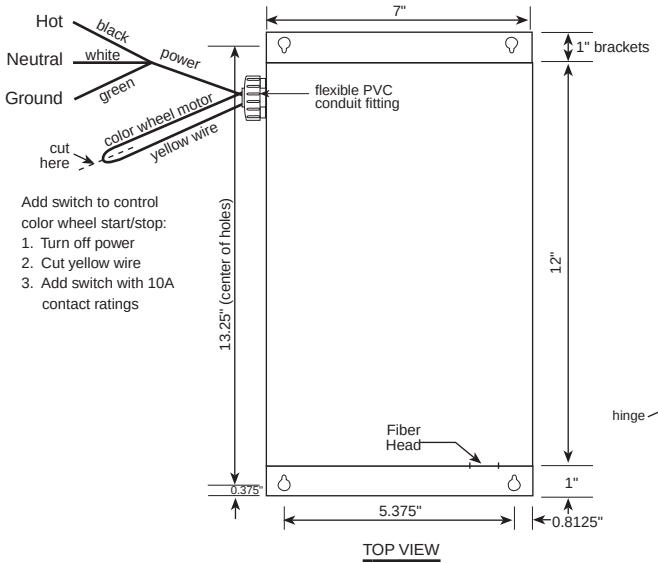






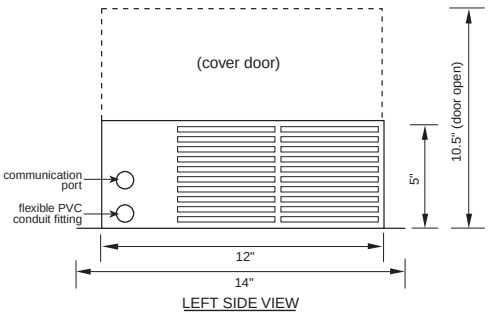


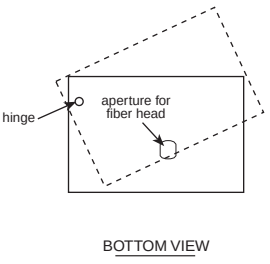
sv.1500

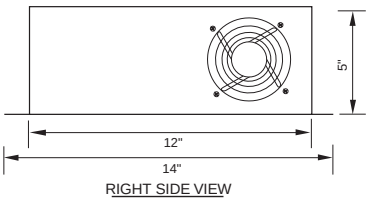


Add switch to control color wheel start/stop:

1. Turn off power
2. Cut yellow wire
3. Add switch with 10A contact ratings







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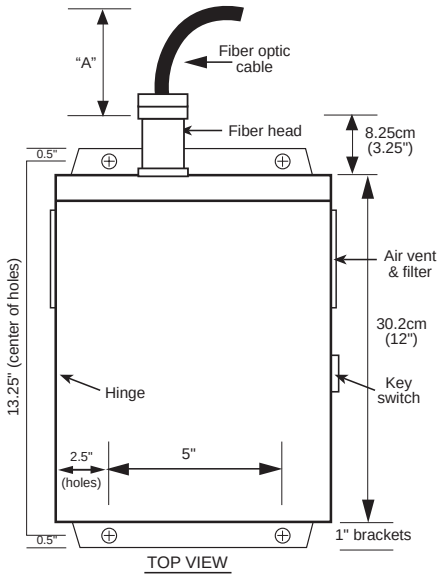
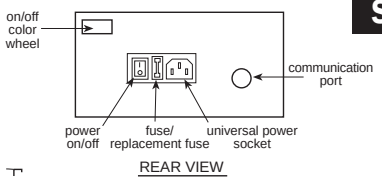
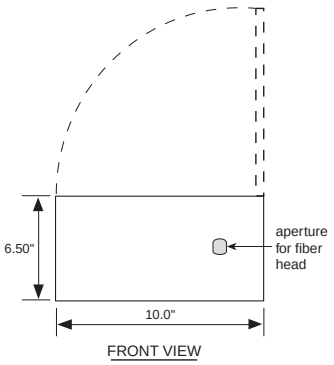
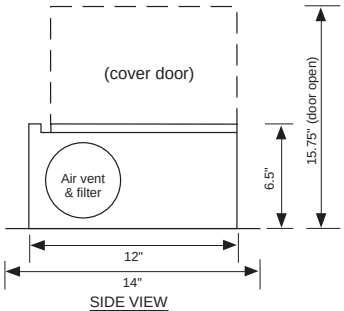
sv.2000D

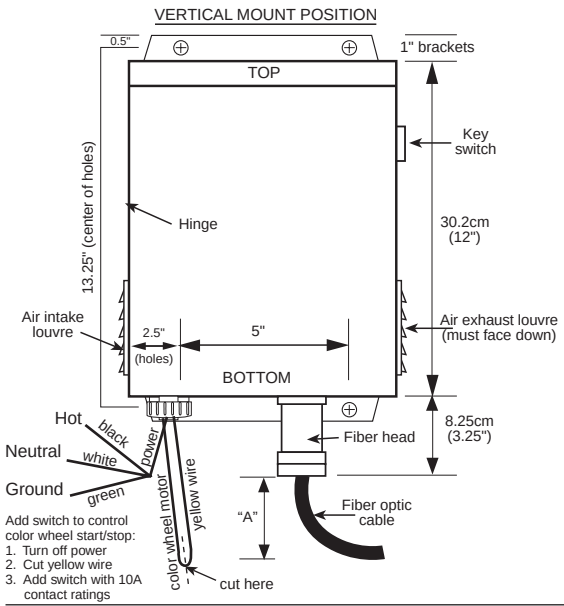


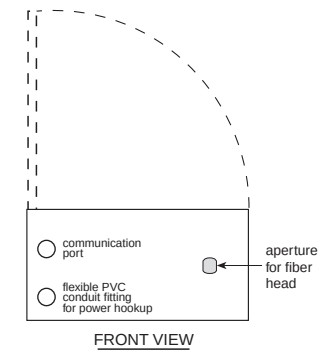


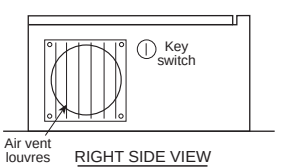


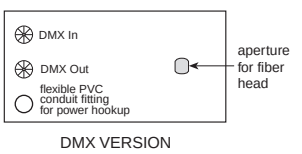


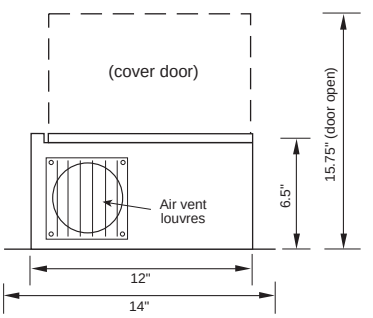
sv.2000W



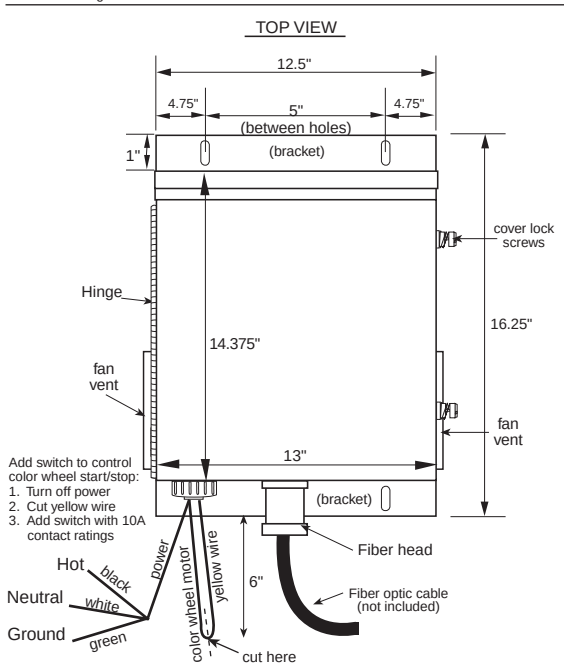


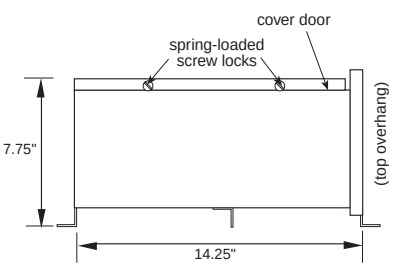


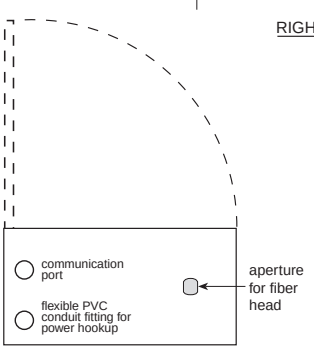


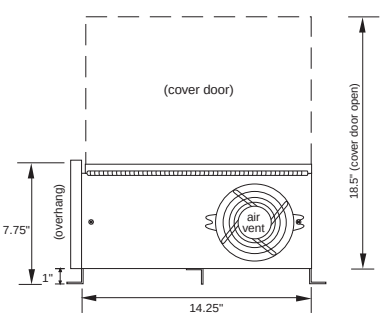


sv.4000



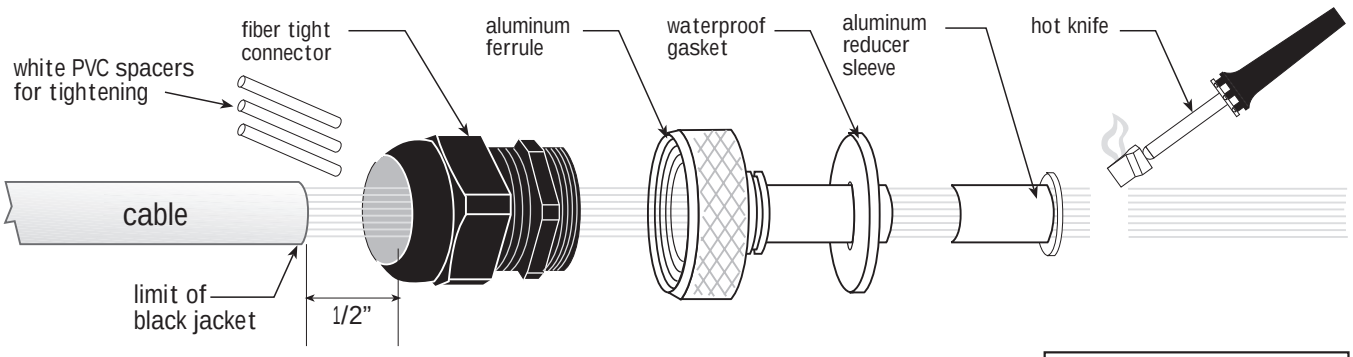






sv.250H

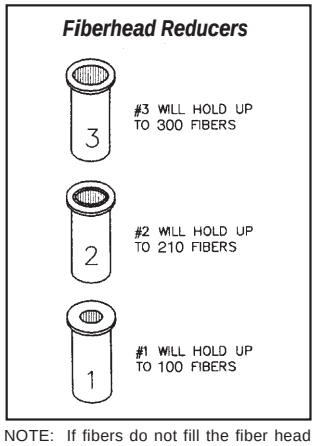
Capacity: 500 fibers



INSTRUCTIONS:

CAUTION: Do not allow the black jacket portion of Endglow cables to come into the fiber tight connector portion of the fiberhead. The black jacket material inside the fiberhead connector may cause overheating and melting of the outer black jacket and fibers.

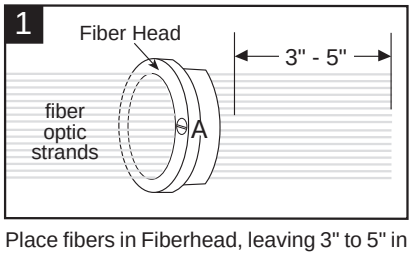
1. Expose the fiber strands by removing approximately 8" of the black or clear PVC outer covering. (For the clear jacket, a reflective white PVC center core tube must be removed.) Caution: do not cut or scratch the exposed fibers.
2. Feed fibers through the fiber tight connector, use reducer (see figure 1) if necessary, then through the aluminum ferrule until 1/2" - 1" of raw fiber will come through the aluminum ferrule. Tighten the connector cap with a wrench or pliers to prevent the fibers from slipping in the head. Use white PVC spacers (provided) to help tighten the head.
3. Using a hot knife, cut the exposed fibers as flush as possible. Protruding fibers can interfere with the color wheel movement. To cut fibers, do not use a "sawing" motion. Apply even pressure on the fibers. NOTE: Allow the hot knife to fully heat up before cutting. It is important to allow the heat to cut the fibers. (Caution: sawing back and forth will damage the fibers.)
4. For a wet location light source, it is necessary to use the waterproof gasket. A waterproof gasket is provided with an adhesive backing. Adhesive side toward the fiber head.
5. The fiber head is now ready to be inserted into the light source. To insert: the notch must be face up to match the opening in the light source. Make sure the fiber head slides all the way through the motor plate. To lock: turn 90° clockwise. NOTE: Sometimes it will be a little hard to insert the fiber head on a new light source for the first time.



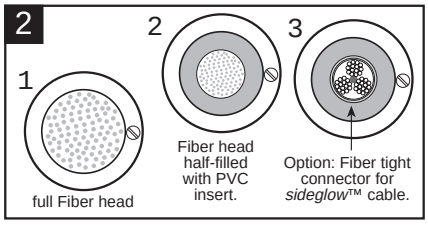
NOTE: If fibers do not fill the fiber head ferrule, use one of the three reducers to fill up the space.

FIGURE 1

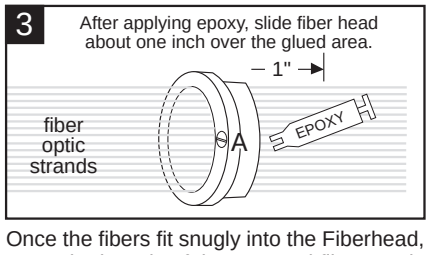
sv.750



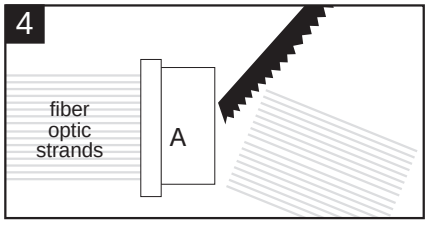
Place fibers in Fiberhead, leaving 3" to 5" in excess.



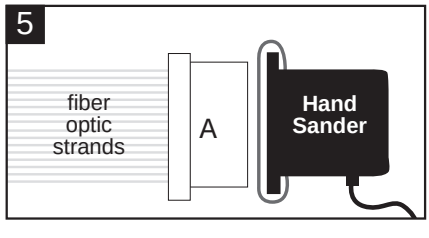
If the amount of fibers does not completely fill the Fiberhead, a PVC insert must be added to compact the fibers.The type of PVC will depend on the fiber bundle or cord.



Once the fibers fit snugly into the Fiberhead, epoxy both ends of the exposed fibers. Mix the epoxy thoroughly into and over the fibers in order to permanently cement them together.



After the epoxy has completely dried, cut the fiber flush to the Fiberhead with a saw. Do not usea hot knife when epoxy is present.



Polish the cut fibersusing a fine grit sandpaper and handsander. Begin with 600 grit, finish with1000 grit, polish until smooth. Final polish with a plastic polisher. The Fiberhead is now ready for use.

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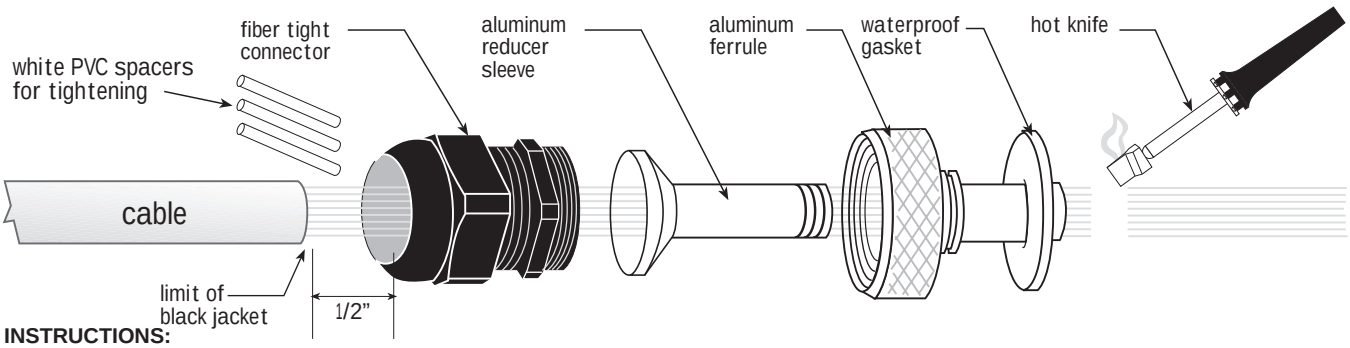
sv.1500, sv.2000

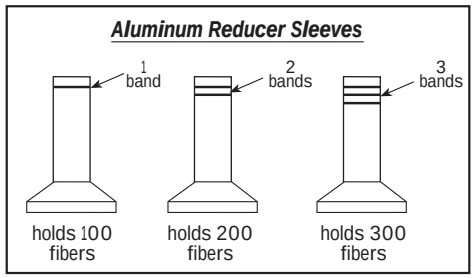
Capacity: 500 fibers



INSTRUCTIONS:

CAUTION: Do not allow the black jacket portion of Endglow cables to come into the fiber tight connector portion of the fiberhead. The black jacket material inside the fiberhead connector may cause overheating and melting of the outer black jacket and fibers.

1. Expose the fiber strands by removing approximately 8" of the black or clear PVC outer covering. NOTE: Strip back black jacket cable so it does not any aluminum part of the fiber head. For the clear jacket, a reflective white PVC center core tube must be removed. Caution: do not cut or scratch the exposed fibers.
2. Feed fibers through the fiber tight connector, use reducer (see figure 1) if necessary, then through the aluminum ferrule until 1/2" - 1" of raw fiber will come through the aluminum ferrule. Tighten the connector cap with a wrench or pliers to prevent the fibers from slipping in the head. Use white PVC spacers (provided) to help tighten the head. If fibers do not fill the fiber head ferrel, insert unused fibers into the ferrel until the fiberhead is full.
3. Using a hot knife, cut the exposed fibers as flush as possible. Protruding fibers can interfere with the color wheel movement. To cut fibers, do not use a "sawing" motion. Apply even pressure on the fibers. NOTE: Allow the hot knife to fully heat up before cutting. It is important to allow the heat to cut the fibers. (Caution: sawing back and forth will damage the fibers.)
4. For a wet location light source, it is necessary to use the waterproof gasket. A waterproof gasket is provided with an adhesive backing. Adhesive side toward the fiber head.
5. The fiber head is now ready to be inserted into the light source. To insert: the notch must be face up to match the opening in the light source. Make sure the fiber head slides all the way through the motor plate. To lock: turn 90° clockwise. NOTE: Sometimes it will be a little hard to insert the fiber head on a new light source for the first time.

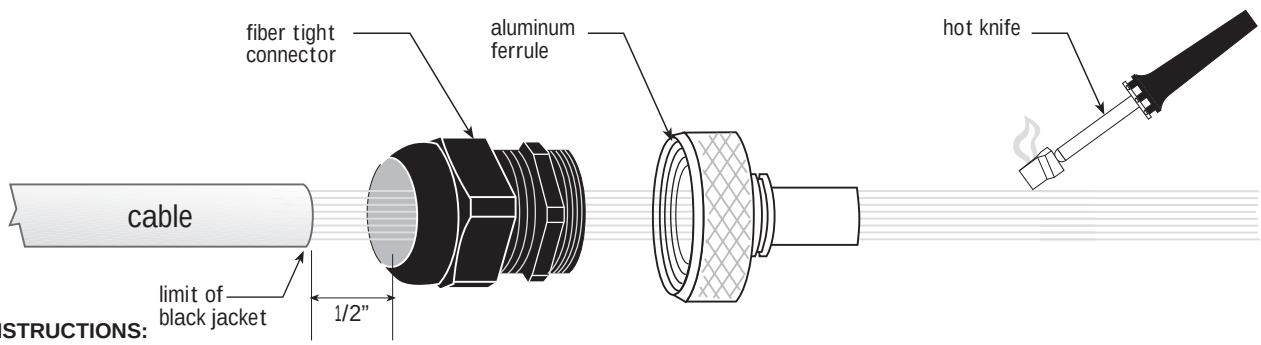


NOTE: If fibers do not fill the fiber head ferrule, use one of the three reducers to fill up the space.

FIGURE 1

sv.4000

Capacity: 300 fibers

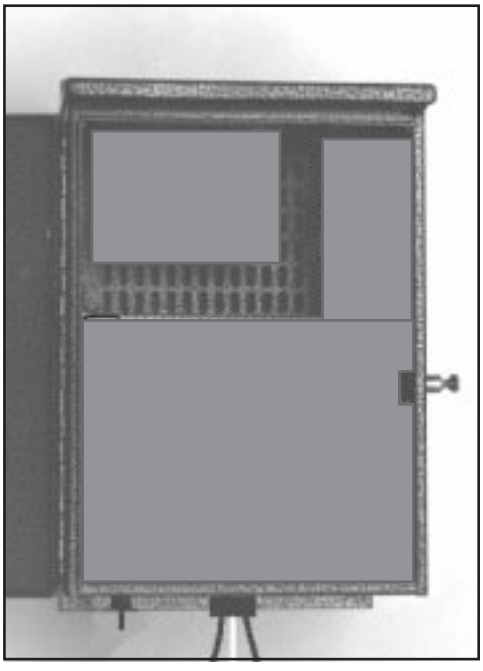


INSTRUCTIONS:

CAUTION: Do not allow the black jacket portion of Endglow cables to come into the fiber tight connector portion of the fiberhead. The black jacket material inside the fiberhead connector may cause overheating and melting of the outer black jacket and fibers.

1. Make sure all fiber optic cable coming out of the ground conduit to be long enough to reach the light source. See above (We recommend an extra 1' - 2' of fiber cable for connection to light source).
2. Expose the fiber strands by removing approximately 8" of the black or clear PVC outer covering. **(For the clear jacket, a reflective white PVC center core tube must be removed.)** Caution: do not cut or scratch the exposed fibers.
3. Feed fiber through the connector cap, fiber head ferrel until 1/2" - 1" of raw fiber will come through the fiber head ferrel. If fibers do not fill the fiber head ferrel, insert unused fibers into the ferrel until the fiberhead is full. Tighten the connector cape with a wrench or pliers to prevent the fibers from slipping in the head. Use white PVC spacers (provided) to help tighten the head.
4. Using a hot knife, cut the exposed fibers as flush as possible. Protruding fibers can interfere with the color wheel movement. To cut fibers, do not use an excessive "sawing" motion. Apply even pressure on the fibers. NOTE: Allow the hot knife to fully heat up before cutting. It is important to allow the heat to cut the fibers. (Caution: sawing back and forth will damage the fibers.)
5. For a wet location light source, it is necessary to use the waterproof gasket. A waterproof gasket is provided with an adhesive backing. Adhesive side towards the fiber head.
6. The fiber head is now ready to be inserted into the light source. To insert: the notch must face up to match the opening in the light source. Make sure fiberhead slides all the way through the motor plate. To lock: turn 90° clockwise.NOTE: Sometimes it will be a little hard to insert the fiber head on a new lightsource for the first time.

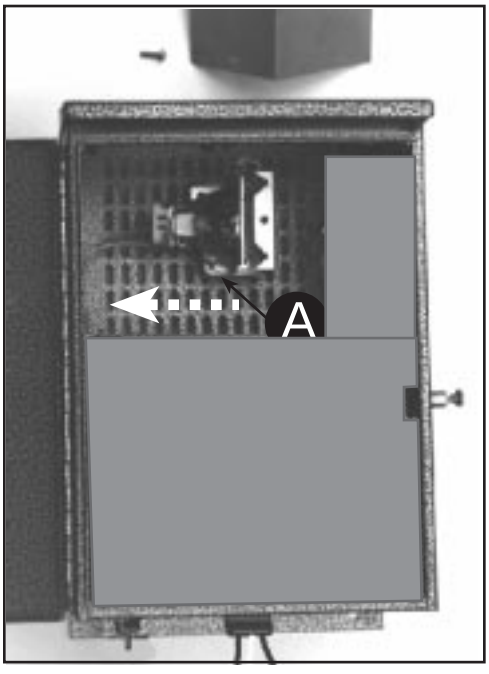
Lamp Replacement for sv.250H



STEP 1

1. Turn off power, open cover.
2. Remove lamp cover screw (A) with phillips screwdriver.

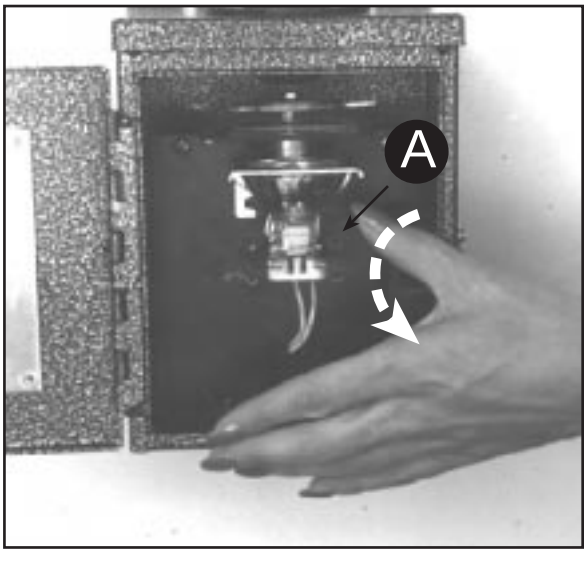
CAUTION: Do not touch bulb when hot. Let cool down before replacing.



STEP 2

3. Pull lever (B) in direction shown to lift lamp from its socket.
4. Return lever to front position.
5. Replace lamp.
6. Replace lamp cover, close light source cover before testing.
7. Turn power on.

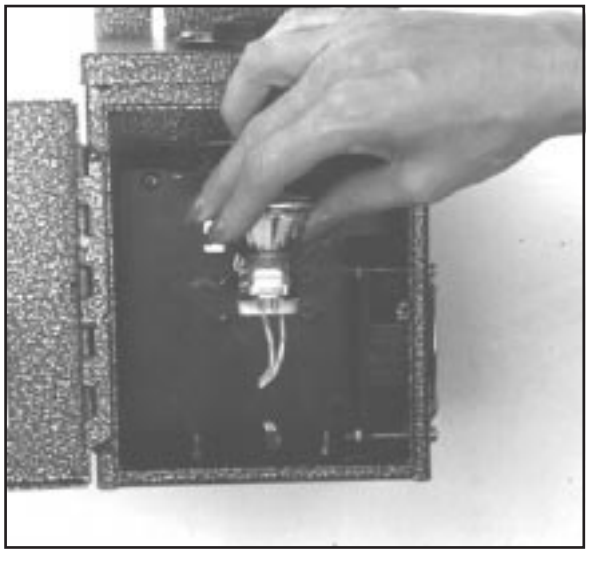
sv.750



STEP 1

1. Turn off power, open cover.
2. Pull lever (A) in direction shown to lift lamp from its socket.

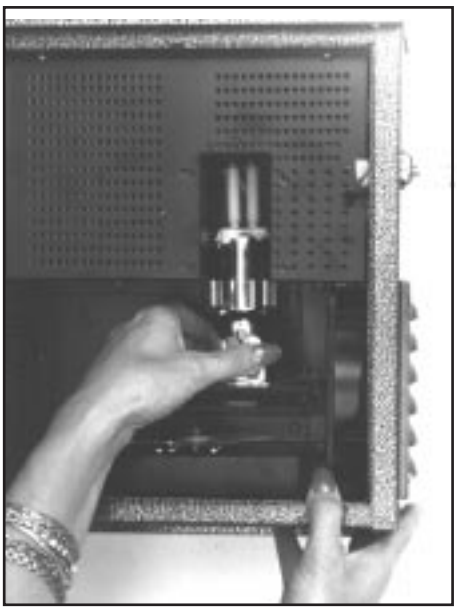
CAUTION: Do not touch bulb when hot. Let cool down before replacing.



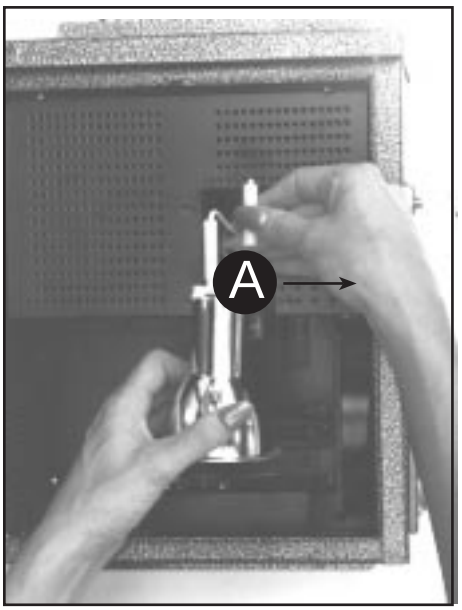
STEP 2

3. Remove lamp.
4. Return lever to front position.
5. Replace lamp.
6. Replace lamp cover, close light source cover before testing.
7. Turn power on.

Lamp Replacement for sv.1500, sv.2000



STEP 1
1. Turn off power, open cover.
2. Pull lamp reflector out of clip holder.



STEP 2
3. Remove electrical connectors (A).
4. Attach connectors and push new lamp into position (refer to Figure 1). Replace lamp with sv.150MHL lamp only.
5. Close ligth source cover and lock key switch before testing.
6. Turn power on.

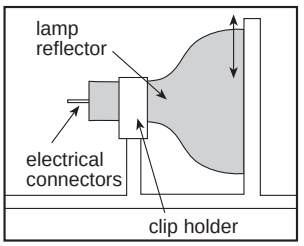
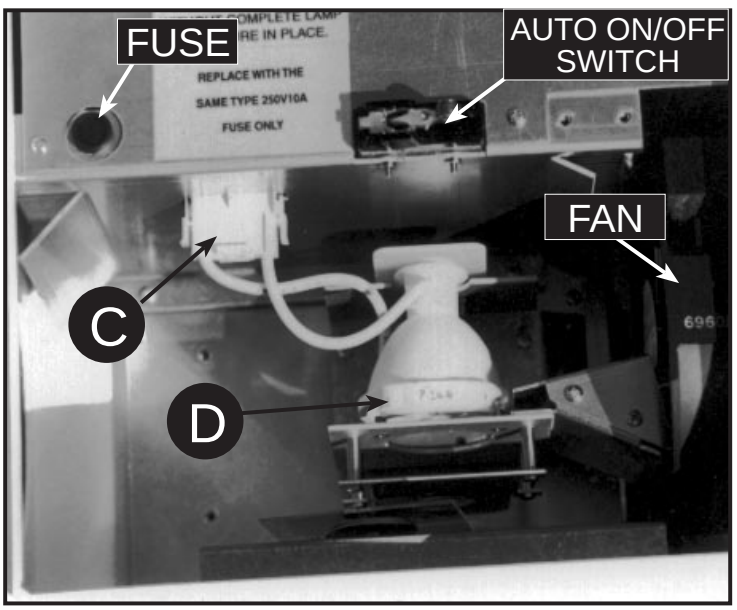


Figure 1 Lamp reflector

sv.4000



STEP 1
1. Turn off power, open cover.
2. Remove lamp cover (A) and its three screws (B) with phillips screwdriver.

STEP 2
3. Remove electrical connector (C) from socket.
4. Turn spring lamp (D) clockwise to free the lamp for removal.

STEP 3
5. Reverse steps 1 through 4 to replace lamp.
6. Replace lamp cover, close light source cover before testing.
7. Turn power on.

Toubleshooting for all Light Sources

Illuminator will not operate:
Make sure illuminator is wired properly.
Make sure the power switch on the back of the light source is in the “up” position.
Make sure the key switch is turned fully clockwise.
If restart, let it cool down for about 3 minutes.
Contact your SUPER***VISION***® service representative if above steps fail.

Illuminator lamp will not light, but the fan is on:
Shut off illuminator immediately.
Check bulb connection.
If lamp still doesn’t operate, replace lamp.
Contact your SUPER***VISION***® service representative if above steps fail.

Illuminator lamp works, but fan is not on:
Shut off illuminator immediately.
Check fan connection.
Contact your SUPER***VISION***® service representative if above steps fail.

Illuminator works but does not change color:
Make sure the color wheel switch on the back of the light source is in the “on” position (for dry location light sources only).
Be sure there are no obstructions in the way of the color wheel.
Check and see if the color wheel nut is on tight.
Check to see if fiber head fibers are touching color wheel.

Illuminator intensity dims over a period of time:
Remove fiber head and inspect fibers for a flush cut at the end of the fiberhead.
Make sure glass filter and color wheel are clean. *(Clean with lens paper and any glass cleaner product)*
Check to see if fiberhead is inserted all the way into the motor plate.
Check to see if fan is working properly.
Make sure fiber cable exits straight out the light source without excess bending.
Check to see if fibers are melting or discoloring in the end of fiber head. (Typical cause: improper ventilation)

Illuminator shuts down after a period of time:
Check if fan is working properly.
Check location of light source for proper ventilation requirements.
Check for obstruction of air vents. (located on underside)

Illuminator melts fiber at the fiber head:
Check location of light source for proper ventilation requirements.
Check if fan is working properly.
Check for obstructions at air vents. (located on underside)

Water is entering into the light source (sv.250H & sv.2000W only)
Check gasket for defects. (sv.250H & sv.2000W)
Check to see if louvres are facing n the down position. (sv.2000W)
Make sure is wall mounted, that fiberhead is facing down. (sv.2000W)

Specifications for sv.250H

UL Listed for Wet Locations
Input Voltage/Current
• 120 VAC. 60Hz / 1.8 Amps
• CE: 220-240VAC, 50Hz, .9 Amps
Lamp
• 250 Watt Halogen MR-16 ELC
• 600 average life hours
Power Consumption
• 250 Watts maximum
Color Wheel
• Standard 4 Color Wheel: clear, hot pink, lime green, cyan.
• Optional 8 Color Wheel: clear, cyan, yellow, turquoise, orange, dark blue, hot pink, lime green.
Optional Colors
• Blue-magenta, magenta, red magenta, primary blue, medium blue, dark green, primary green, amber, red (call for lead times).
Motors
• Standard 3 RPM motor “one direction only”, 50,000 life hours.
Fan
• 80,000 life hours
• 120 VAC 60 Hz /115 CFM/ 20 Watt
• 220 VAC 50 Hz . 115 CFM / 21 Watt
Safety Features
• Thermal protector “shuts down illuminator when temperature reaches 185°F.
• Current protector “protects illuminator from current spikes”.
Operating Temperature
• -20°F to 110°F
• -29°C to 44°C
Dimensions
• 7.5”W* x 12.5”L x 7.8”H (14.5 with door open), *add 2.5” for fiberhead.
Weight
• 18 lbs.
Finish
• Powder coating silver vein, no bare metal inside or out.
• Water, corrosion and chemical resistant.
Standard Features
• On/off power switch.
• Stop/start color wheel switch.
• 1/2” flexible conduit fitting for hard wiring. for use with flexible meal conduit.
Location Listing / Installation
• Indoor/Outdoor - surface or wall mount.
Ventilation
• Forced ventilation 115 CFM, 6” clearance required to nearest surface. 2’ clearance between each illuminator.
Storage Temperature
• -40°F to 140°F
• -40°C to 60°C
Fiber Capacity
• 500 strands maximum
Warranty:
• 1 Year, excluding lamp.

sv.750

UL Listed for Wet Locations
Input Voltage/Current
• 120 VAC. 60Hz / .75 Amps
• CE: 220-240VAC, 50Hz, .56 Amps
• 12 VAC / 6.5 Amps
Lamp
• 75 watt MR-16 EYC watt maximum
• 4000 average life hours
Power Consumption
• 88 Watts maximum
Safety Features
• Thermal protector “shuts down illuminator when temperature reaches 122°F.
• Current protector “protects illuminator from current spikes”.
• Power inlet - 2 Amp fuse (extra fuse provided).
Operating Temperature
• -20°F to 110°F
• -29°C to 44°C
Dimensions
• 7.5”W* x 9.5”L x 5.75”H (11” with door open), *add 2.5” for fiberhead.
Weight
• 7 lbs.
Finish
• Powder coating silver vein, no bare metal inside or out.
• Water, corrosion and chemical resistant.
Standard Features
• Universal power inlet with on/off power switch.
• Stop/start color wheel switch.
• AC power cord.
Location Listing / Installation
• Indoor - surface or wall mount.
Ventilation
• Forced ventilation 21 CFM, 6” clearance required to nearest surface.
• 2’ clearance between each illuminator.
Warranty
• 1 Year, excluding lamp.

sv.1500

UL Listed for Dry Locations
Input Voltage/Current
• 120 VAC, 60Hz
• CE: 220-240VAC, 50Hz
• 100 VAC / 50-60 Amps
• 277 VAC, 60Hz
Lamp
• 150 Watt metal halide
• 6000 average life hours
Power Consumption
• 200 Watts maximum
Color Wheel
• Standard 4 Color Wheel: clear, hot pink, lime green, cyan.
• Optional 8 Color Wheel: clear, cyan, yellow, turquoise, orange, dark blue, hot pink, lime green.
Optional Colors
• Blue-magenta, magenta, red magenta, primary blue, medium blue, dark green, primary green, amber, red (call for lead times).
Safety Features
• Thermal protector “shuts down illuminator when temperature reaches 185°F.
• Current protector “protects illuminator from current spikes”.
• Power inlet - 2 Amp fuse (extra fuse provided).
Operating Temperature
• -20°F to 110°F
• -29°C to 44°C
Dimensions
• 7”W* x 12”L x 5”H (10.5” with door open), *add 2.5” for fiberhead.
Weight
• 16 lbs.
Finish
• Black wrinkle powder coat
• Water, corrosion and chemical resistant.
Standard Features
• 1/2” flexible conduit - rady for use with flexible metal conduit..
Location Listing / Installation
• Indoor - surface or wall mount.
Ventilation
• Forced ventilation 115 CFM, 6” clearance required to nearest surface.
• 2’ clearance between each illuminator.
Warranty
• 1 Year, excluding lamp.

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Specifications for sv.2000D

UL/cUL Listed for Dry Locations
Input Voltage/Current
- 120 VAC. 60Hz / 1.8 Amps
- CE: 220-240VAC, 50Hz. / 9 Amps
- 277 VAC, 60Hz / .8 Amps

Lamp
- 150 Watt metal halide
- 6000 average life hours
- Reflector - Super Vision design

Fuse
- 5 Amp

Power Consumption
- 200 Watts maximum

Color Wheel
- Standard 4 Color Wheel: clear, hot pink, lime green, cyan.
- Optional 8 Color Wheel: clear, cyan, yellow, turquoise, orange, dark blue, hot pink, lime green.

Optional Colors
- Blue-magenta, magenta, red magenta, primary blue, medium blue, dark green, primary green, amber, red (call for lead times).

Motors
- Standard 3 RPM motor “one direction only”, 50,000 life hours.

Fan
- 80,000 life hours
- 120 VAC 60 Hz /115 CFM/ 20 Watt
- 220 VAC 50 Hz / 115 CFM / 21 Watt

Safety Features
- Thermal protector shuts down when temperatures reach 185°F.
- Current protector “protects illuminator from current spikes”.
- Power inlet with 5 Amp fuse and extra fuse.
- Power key switch (must be off to open illuminator)

Operating Temperature
- -20°F to 110°F
- -29°C to 44°C

Dimensions
- 10”W* x 12”L x 6.5”H (15.5” with door open), *add 2.5” for fiberhead.

Weight
- 24 lbs.

Finish
- Powder coating silver vein, no bare metal inside or out.
- Water, corrosion and chemical resistant.

Standard Features
- Universal power inlet with on/off switch.
- On/off color wheel switch.
- On/off power key swicth / door lock.

Location Listing / Installation
- Indoor - surface or wall mount.

Ventilation
- Forced ventilation 115 CFM, 6” clearance required to nearest surface. 2’ clearance between each illuminator.

Storage Temperature
- -40°F to 140°F
- -40°C to 60°C

Fiber Capacity
- 500 strands maximum

Warranty:
- 1 Year, excluding lamp.

sv.2000W

UL/cUL Listed for Dry Locations
Input Voltage/Current
- 120 VAC. 60Hz / 1.8 Amps
- CE: 220-240VAC, 50Hz. / 9 Amps
- 277 VAC, 60Hz / .8 Amps

Lamp
- 150 Watt metal halide
- 6000 average life hours
- Reflector - Super Vision design

Power Consumption
- 200 Watts maximum

Color Wheel
- Standard 4 Color Wheel: clear, hot pink, lime green, cyan.
- Optional 8 Color Wheel: clear, cyan, yellow, turquoise, orange, dark blue, hot pink, lime green.

Optional Colors
- Blue-magenta, magenta, red magenta, primary blue, medium blue, dark green, primary green, amber, red (call for lead times).

Motors
- Standard 3 RPM motor “one direction only”, 50,000 life hours.

Fan
- 80,000 life hours
- 120 VAC 60 Hz /115 CFM/ 20 Watt
- 220 VAC 50 Hz / 115 CFM / 21 Wattq

Safety Features
- Thermal protector shuts down when temperatures reach 185°F.
- Current protector “protects illuminator from current spikes”.
- Power key switch (must be off to open illuminator)

Operating Temperature
- -20°F to 110°F
- -29°C to 44°C

Dimensions
- 10”W* x 12”L x 6.5”H (15.5” with door open), *add 2.5” for fiberhead.

Weight
- 24 lbs. 11

Finish
- Powder coating silver vein, no bare metal inside or out.
- Water, corrosion and chemical resistant.

Standard Features
- 1/2” flexible conduit -ready for use with flexible metal conduit.

Location Listing / Installation
- Outdoor - surface or wall mount, must be 4’ above ground for UL approval.

Ventilation
- Forced ventilation 115 CFM, 6” clearance required to nearest surface. 2’ clearance between each illuminator.

Storage Temperature
- -40°F to 140°F
- -40°C to 60°C

Fiber Capacity
- 500 strands maximum

Warranty:
- 1 Year, excluding lamp.

sv.4000

UL Listed for Damp Locations
Input Voltage/Current
- 120 VAC, 60Hz
- CE: 220-240VAC, 50Hz
- 100 VAC / 50-60 Amps
- 277 VAC, 60Hz

Lamp
- 400 Wat metal halide
- 1500 average life hours

Power Consumption
- 200 Watts maximum

Color Wheel
- Standard 4 Color Wheel: clear, hot pink, lime green, cyan.
- Optional 8 Color Wheel: clear, cyan, yellow, turquoise, orange, dark blue, hot pink, lime green.

Optional Colors
- Blue-magenta, magenta, red magenta, primary blue, medium blue, dark green, primary green, amber, red (call for lead times).

Safety Features
- Thermal protector “shuts down illuminator when temperature reaches 185°F.
- Current protector “protects illuminator from current spikes”.
- Power inlet - 2 Amp fuse (extra fuse provided).

Operating Temperature
- -20°F to 110°F
- -29°C to 44°C

Dimensions
- 7”W* x 12”L x 5”H (10.5” with door open), *add 2.5” for fiberhead.

Weight
- 16 lbs.

Finish
- White powder coat
- Water, corrosion and chemical resistant.

Standard Features
- 1/2” flexible conduit - ready for use with flexible metal conduit..

Location Listing / Installation
- Indoor - surface or wall mount.

Ventilation
- Forced ventilation 220 CFM, 6” clearance required to nearest surface.
- 2’ clearance between each illuminator.

Warranty
- 1 Year, excluding lamp.

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Warranty

Super Vision International, Inc. warranties its products, excluding lamps
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In event of a defect in material or workmanship, during warranty period,
its discretion) its products under the conditions of the Warranty. Super
materials but not for shipping. THIS REMEDY IS THE SOLE AND EXCLUSIVE RE
ALL CLAIMS RELATING TO ANY BREACH OF WARRANTY BY Super Vision¤.

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   are expressly disclaimed. Some states do not allow the exclusion of an
   may not apply to you.
2. Super Vision¤ is not responsible for defects or malfunctions in and/
   sale is specifically made without warranty. In such sales the discla
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   VARY FROM STATE TO STATE.

If you discover a defect or malfunction during the period to which this
Vision¤ for information on receiving warranty service.

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